

Notice of Allowability

Application No.

10/035,736

Examiner

Callie E. Shosho

Applicant(s)

SMITH ET AL.

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 1/3/05 and telephonic interview conducted 5/12/05.
2. ☒ The allowed claim(s) is/are 1-5,9-15,19-26,31-33 and 40-42.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>5/12/05</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

(1) Claim 1, first line after the formulae, after "is", delete "an alkylene group,".

(2) Claim 11, first line after the formulae, after "is", delete "an alkylene group,".

(3) Claim 21, line 3, after "(c)", delete "a polyquaternary amine compound" and insert "a quaternary ammonium substituted UV absorbing compound".

(4) Claim 21, first line after the formulae, after "is", delete "an alkylene group,".

(5) Claim 21, line 5 after the formulae, after "(d)", delete "a quaternary ammonium substituted UV absorbing compound" and insert "a polyquaternary amine compound".

(6) Claim 24, first line after the formulae, after "is", delete "an alkylene group,".

2. Authorization for this examiner's amendment was given in a telephone interview with Judith Byorick on 5/12/05.

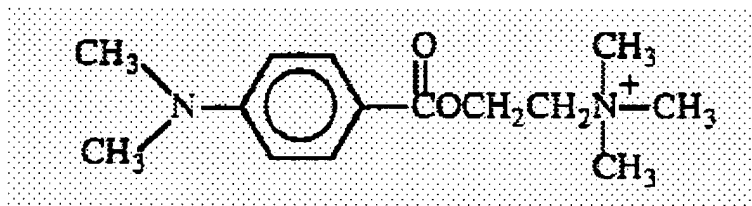
Statement of Reasons for Allowance

3. The present claims are allowable over the “closest” prior art Gundlach et al. (U.S. 6,054,505), Vieira et al. (U.S. 5,096,781), and WO 97/20000 for the following reasons:

Gundlach et al. disclose ink comprising water, 0.1-040% nonpolymeric salt, 1-5% anionic dye, and 0.01-50% polyquaternary amine. It is disclosed that the anionic dye can complex with the polyquaternary amine. There is further disclosed process wherein the ink is incorporated into ink jet printer and ejected onto substrate. However, there is no disclosure or suggestion in Gundlach et al. of quaternary ammonium substituted UV absorbing compound.

In order to meet the requirement in the claims of quaternary ammonium substituted UV absorbing compound, Gundlach et al. was combined with either WO 97/20000 or Vieira et al.

WO 97/20000 discloses ink jet ink comprising colorant stabilizer that is quaternary ammonium substituted UV absorbing compound, namely, choline chloride ester of dimethylaminobenzoic acid of the formula:



However, in light of the amendment to the present claims that all now require specific quaternary ammonium substituted UV absorbing compound as set forth in the formula found in claim 1,

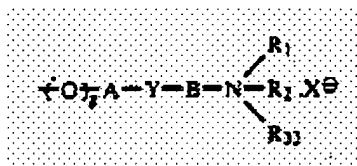
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claim 11, claim 21, and claim 24, i.e. 2-(3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl) quaternary compounds, the quaternary ammonium substituted UV absorbing compound of WO 97/20000 is outside the scope of the present claims.

Vieira et al. disclose the use of 0.01-20% light stabilizer of the formula:



where U is radical of hydroxyphenylbenzotriazole and SOL is:



wherein g is 0, A-Y-B- corresponds to presently claimed R₁ and R₁, R₂, and R₃₃ correspond to presently claimed R₂, R₃, and R₄. However, there is no disclosure or suggestion that A-Y-B, which corresponds to presently claimed R₁, is arylalkylene group or polyoxyalkylene group as now required in all present claims (see examiner's amendment in paragraph 1 above).

Thus, it is clear that Gundlach et al., Vieira et al., and WO 97/20000, either alone or in combination, do not disclose or suggest the present invention.

In light of the above, it is clear that the rejections of record are untenable and so, the present claims are passed to issue.

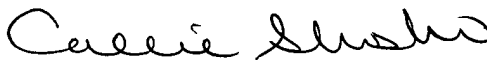
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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
5/13/05